USER'S INFORMATION, MAINTENANCE AND SERVICE MANUAL

MODELS: P*DU-"V" / G8V / L8V
Two Stage Variable Speed Upflow / LoNOx)

This product was manufactured in a plant whose quality system is certified/registered as being in conformity with ISO 9001.

TABLE OF CONTENTS

CONTACT INFORMATION 1
USER'S INFORMATION 1
SAFETY 1
INSTRUCTIONS FOR EXAMINING THE FURNACE INSTALLATION 2
HOW YOUR GAS FURNACE WORKS 3
START-UP AND SHUTDOWN INSTRUCTIONS 3
FURNACE USER MAINTENANCE 3
SERVICE AND MAINTENANCE MANUAL 5
SAFETY SECTION 5
FURNACE MAINTENANCE SECTION 5
SEQUENCE OF OPERATION 5
CFM / TIMER BOARD 6
HEATING AIRFLOW 6
COOLING AIRFLOW 7
DIRECT DRIVE BLOWER MOTOR 7
INSTALLATION OF PSC MOTOR: 7
FURNACE CLEANING SECTION 8
TROUBLESHOOTING 8
FURNACE DIAGNOSTICS 9
REPLACEMENT PARTS LIST 11
FIELD INSTALLED ACCESSORIES - NON-ELECTRICAL 13
REPLACEMENT PART CONTACT INFORMATION 13
WIRING DIAGRAM 14
LIMITED WARRANTY 16

CONTACT INFORMATION

- Go to website at www.york.com click on "contact", then click on "contact form" and follow the instructions.
- Contact us by mail:

York International
Consumer Relations
5005 York Drive
Norman, OK 73069

The manufacturer recommends that the user read all sections of this manual and keep the manual for future reference.

⚠WARNING

FIRE OR EXPLOSION HAZARD - Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

— Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

— WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone (including cell phone) in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

SECTION I: USER'S INFORMATION

SAFETY

1. The furnace area must be kept clear and free of combustible materials, gasoline and other flammable vapors and liquids.
2. Insulating materials may be combustible. The furnace must be kept free and clear of insulating materials. The furnace area must be examined when installed in an attic or other insulated space or when insulation is added to be sure that the insulation material has been kept away from the furnace.
3. The furnace needs air for combustion in order to operate properly and safely. Do not block or obstruct air openings on the furnace, air openings to the area where the furnace is installed, or spaces around the furnace.
4. Follow the instructions exactly as shown on the OPERATING INSTRUCTION LABEL or the Start-up and Shutdown Instructions on Page 3 of this manual when lighting the furnace or turning the furnace off.
5. Should the gas supply fail to shut off or if overheating occurs, shut off the gas valve to the furnace before shutting off the electrical supply.
6. Do not use this furnace if any part has been under water. A flood-damaged furnace is extremely dangerous. Attempts to use the furnace can result in fire or explosion. A qualified service agency should be contacted to inspect the furnace and replace all gas controls, control system parts, electrical parts that have been wet or the furnace if deemed necessary.

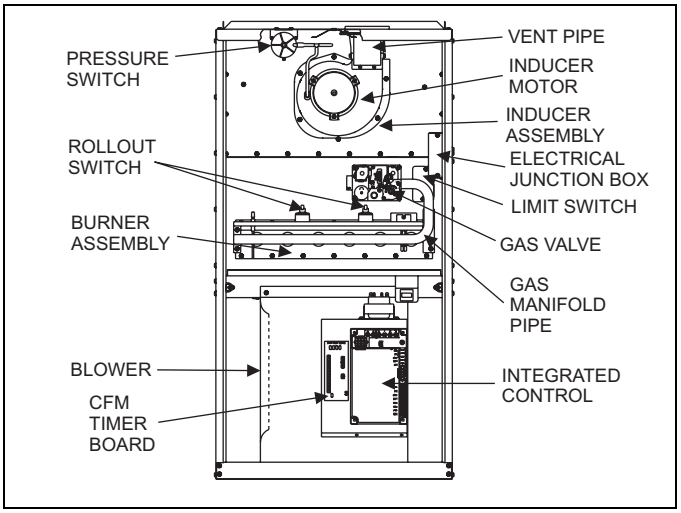


FIGURE 1: Component Locations

7. NEVER . . .Store flammable materials of any kind near your furnace. Gasoline, solvents, and other volatile liquids should be stored only in approved containers outside your home. These materials vaporize easily and are extremely dangerous.
8. NEVER . . .Store cleaning materials near your furnace. Materials such as bleaches, detergents, powdered cleansers, etc., can cause corrosion of the heat exchangers.
9. NEVER . . . Use the area around your furnace as a storage area for items which could block the normal flow of air. This flow of air is required for ventilation of the various furnace components.

⚠WARNING

FIRE OR EXPLOSION HAZARD

This furnace is designed and approved for use with Natural Gas and (LP) Propane Gas ONLY. DO NOT BURN ANY LIQUID FUEL OR SOLID FUEL IN THIS FURNACE.

Burning any unapproved fuel will result in damage to the furnace heat exchanger, which could result in Fire, Personal Injury, and/or Property Damage.

INSTRUCTIONS FOR EXAMINING THE FURNACE INSTALLATION

It is the owner's responsibility to ensure that an annual inspection of the entire heating portion of the unit is made by a qualified service agency. Examine the furnace as outlined below in steps "1 - 6" before each heating season. Use Figure 3 for visual reference.

1. Examine the heat exchanger, vent pipe, combustion air passeges, vent connectors and chimney to be sure they are clear and free of obstructions.
2. Examine the vent pipe making sure it is firmly in place, that it slopes slightly upward and is physically sound without holes and all of the connections are secure.
3. Examine the return-air duct connections to make sure they are physically sound, sealed to the furnace casing, and the ducts terminate outside the space containing the furnace.
4. Examine the furnace casing making sure the physical support is sound without sagging, cracks or gaps. Examine the furnace base making sure it is physically sound without cracks, gaps or sagging and has a good seal.
5. Examine the furnace casing for obvious signs of deterioration.
6. Examine the burner flames to make sure they are in good adjustment. Refer to the pictorial sketch shown in Figure 2 as a comparison to the actual flame.

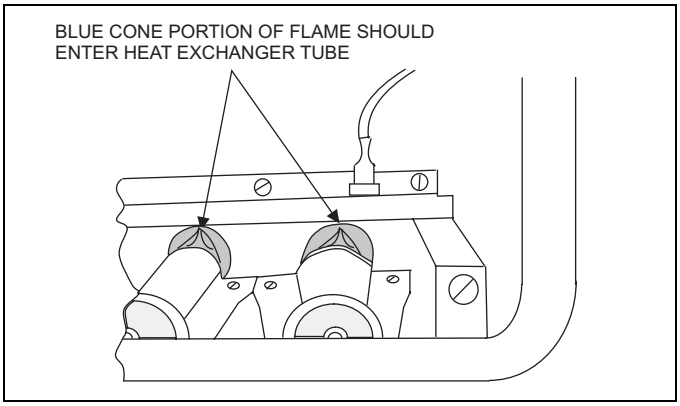


FIGURE 2: Burner Flame Drawing

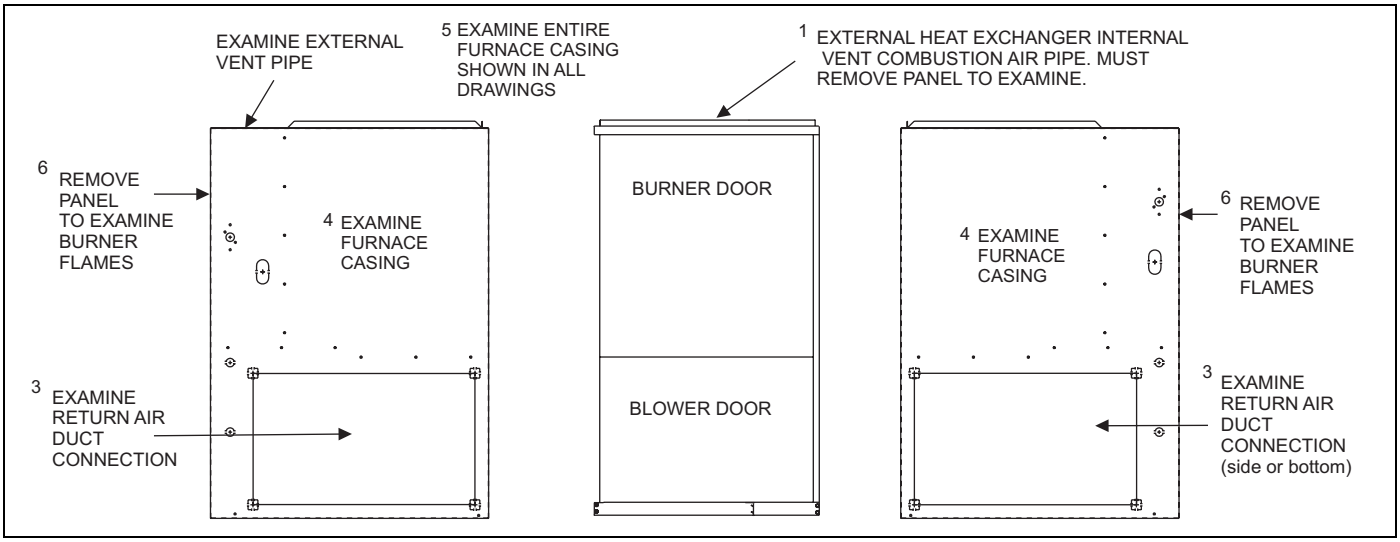

EXAMINE EXTERNAL VENT PIPE
5 EXAMINE ENTIRE FURNACE CASING SHOWN IN ALL DRAWINGS
1 EXTERNAL HEAT EXCHANGER INTERNAL VENT COMBUSTION AIR PIPE. MUST REMOVE PANEL TO EXAMINE.
6 REMOVE PANEL TO EXAMINE BURNER FLAMES
4 EXAMINE FURNACE CASING
BURNER DOOR
BLOWER DOOR
4 EXAMINE FURNACE CASING
6 REMOVE PANEL TO EXAMINE BURNER FLAMES
3 EXAMINE RETURN AIR DUCT CONNECTION
3 EXAMINE RETURN AIR DUCT CONNECTION (side or bottom)

FIGURE 3: Furnace Examination Checkpoints

HOW YOUR GAS FURNACE WORKS

Your furnace is a very easy appliance to take for granted. Season after season, it sits there in your home, keeping you warm and comfortable. For this reason, you may never have given much thought to the way your furnace operates. In order to get the safest and most efficient operation from your furnace, you should understand how your furnace does its job.

When you set your thermostat to provide more heat in your home, you are starting the heating cycle of the furnace. First, the inducer motor starts to purge the heat exchanger of any remaining gases. Next, the hot surface ignitor glows and after a warm-up period the gas valve opens and ignition occurs. A short time later, the blower starts and distributes the warm air throughout the home. When the temperature setting on your thermostat is reached, the gas valve closes, the main burners are turned off, and the blower continues to run until the remaining warm air in the system is distributed. When the blower stops, the heating cycle has ended.

START-UP AND SHUTDOWN INSTRUCTIONS

Read the Instructions Below Before Trying to Start the Furnace

⚠WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, and/or loss of life.

A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. BEFORE OPERATING; smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

C. Use only your hand to push the gas control switch to the “on” position. Never use tools. If the switch will not operate by hand, don’t try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control, which has been under water.

Operating Instructions:

1. STOP! Read the safety information above.
2. Set the thermostat to the lowest setting.
3. Turn off all electric power to the appliance.
4. Remove burner door.
5. Move gas control switch to the “OFF” position. Do not force. See Figure 4.
6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow “B” in the safety information above. If you don’t smell gas, go to next step.
7. Move gas control switch to the “ON” position. Do not force. See Figure 4.
8. Replace burner door.
9. Turn on all electric power to the appliance.
10. Set thermostat to the desired setting. Burner will light, which may take 30-60 seconds.
11. After three (3) trials for ignition, if the appliance will not operate follow the instructions, “TO TURN OFF THE APPLIANCE” and call your service technician or gas supplier.

To Turn Off the Appliance:

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Remove burner access panel.
4. Move gas control switch to the “OFF” position. See Figure 4.
5. Replace burner door.

⚠WARNING

Should overheating occur, or the gas valve fail to shut off, turn the external manual gas valve in the gas supply line to the furnace to the “off” position and let the furnace cool off before shutting off the electrical power supply. Refer to Figure 5.

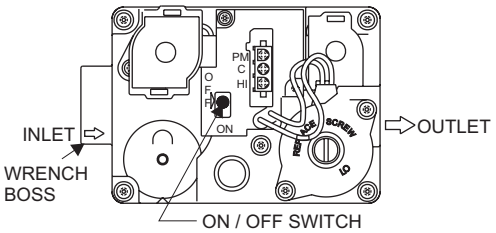


FIGURE 4: Gas Valve - White Rodgers

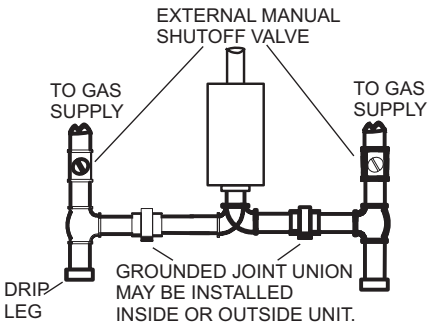

EXTERNAL MANUAL SHUTOFF VALVE
TO GAS SUPPLY
TO GAS SUPPLY
DRIP LEG
GROUNDED JOINT UNION MAY BE INSTALLED INSIDE OR OUTSIDE UNIT.

FIGURE 5: Gas Piping

NOTE: The spring-loaded safety cut-off switch, mounted under the blower deck will automatically cut off the electrical power supply to the furnace when the blower panel is removed. As a safety precaution, all electrical power and the gas supply to the furnace should be turned off before servicing.

FURNACE USER MAINTENANCE

⚠WARNING

Before proceeding, be sure the area is well ventilated. Turn the thermostat OFF. If the blower is running, wait until it stops automatically. Turn OFF the gas and electrical power supplies to the furnace. Check all metal parts and surfaces to be sure they have cooled to room temperature before you begin.

Every time the filters are changed the following items should be visually inspected:

- Check vent pipe for blockage or leakage.
- Check all components to be sure they are in good condition and that there are no obvious signs of deterioration.

- Check for dirt or lint on any surfaces or on components. Do not try to clean any of the surfaces or components. Cleaning of the furnace and its components must be done by a qualified service professional.

If, during the inspection of your furnace, you find any of the following conditions:

- Excessive amounts of dust and lint on components.
- Damaged or deteriorated components or surfaces.
- Leaks or blockage in the vent pipe passages.
- Water on any surface inside or outside of the furnace.

Do not operate the furnace, call a certified dealer / servicing contractor to check and / or clean your furnace, or for more information if you have questions about the operation of your furnace.

If all components appear to be in good operating condition, replace the front panels. Turn ON the gas and electrical power supplies to the furnace, and set thermostat to the desired temperature.

Air Filters

Dirty filters greatly restrict the flow of air and may cause damage to the moving parts of the furnace. If the filters become clogged the heat exchangers and blower motor could overheat resulting in a potentially dangerous situation. The filters should be checked every 3 months. On new construction, check the filters every week for the first four weeks and every three weeks after that, especially if the indoor fan is running continuously. When replacing the filter(s) you must use filters that are the same size as those recommended in Table 1. Use the following procedure to determine the filter size. Never operate your furnace without a suitable air filter.

1. Measure the furnace width and use that measurement to determine the cabinet width.
   - A 14-1/2" wide cabinet is a "A" cabinet.
   - A 17-1/2" wide cabinet is a "B" cabinet.
   - A 21" wide cabinet is a "C" cabinet.
   - A 24-1/2" wide cabinet is a "D" cabinet.
2. Locate the cabinet size on Table 1 then determine whether you have a bottom or side return air duct using the following method.
   a. If the return air filter is on the left or right side of the furnace it is a side return
   b. If the air filter is on the bottom of the furnace then you have a bottom return.
   C. If the air filters are on the bottom and the side of the furnace then you have a bottom and side return. You must replace both air filters. Table 1 will indicate 2 filters by using brackets with the number two (2).
   D. If the air filters are on both sides of the furnace then you have a two sided return. You must replace both air filters. Table 1 will indicate 2 filters by using brackets with the number two (2).
3. After you determine the cabinet size and what return configuration you have, look up the recommended filter size from Table 1.

Removing Filters

Internally Mounted Air Filters

Most upflow furnaces have their filters located on the side or bottom of the furnace in a filter wire retainer located inside the blower compartment. To check filters located in the blower compartment:

1. Remove the upper furnace door by lifting up. Pull out bottom of door and lower from furnace.
2. Remove the blower compartment panel by lifting up.
3. The filters will be located on the bottom or on one of the sides. To remove bottom-mounted or side mounted filter (s) on all furnaces, push the looped end of the filter retainer rod in, and then move the retainer rod away from the filter.
4. Reverse the procedure to reinstall filters.

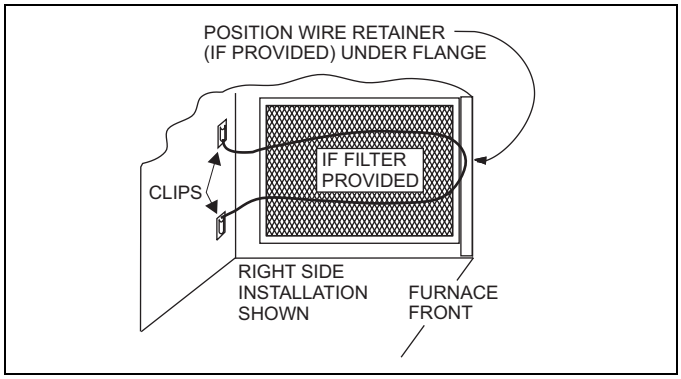


FIGURE 6: Upflow Internal Filter Retainer

Externally Mounted Air Filters

Some installations may have the air filter in a rack attached to the casing of the furnace or placed in the return air duct. You can gain access to the filter by pulling on the door or unscrewing the retaining screw, then slide the filter(s) out of its channel. Replace throw away filter(s) with the same size new filter(s). Throw away filter(s) may be replaced with cleanable filter(s) at this time. Cleanable filter(s) may be cleaned as described in the manufacturer instructions or as described below and then re-installed.

To replace the filter after cleaning you must do the following:

1. Slide filter into place.
2. Snap the door on or place the door in position and tighten the retaining screws, if provided.
3. Make sure the door is secure to the end of the filter rack.

TABLE 1: Filter Sizes

Cabinet Size	Side (in)	Side (cm)	Bottom (in)	Bottom (cm)
A	16 x 26	40.6 x 66.0	14 x 26	35.6 x 66.0
B	16 x 26	40.6 x 66.0	16 x 26	40.7 x 66.0
C	(2) 16 x 26	(2) 40.6 x 66.0	20 x 26	50.8 x 66.0
C	(2) 16 x 26	(2) 40.6 x 66.0	20 x 26	50.8 x 66.0

How to Clean your Filter

High-velocity filters may be cleaned with a vacuum cleaner or washed with a garden hose. Be sure to shake off excess water and allow filter to completely dry before re-installing the filter.

Blower Care

Even with good filters properly in place, blower wheels and motors will become dust laden after long months of operation. The entire blower assembly should be inspected annually. If the motor and wheel are heavily coated with dust, they can be brushed and cleaned with a vacuum cleaner. If the blower cannot be properly cleaned without removing it from the furnace, then this service must be performed by a qualified service agency.

⚠WARNING

Make sure you DO NOT move the clip on weight on the indoor fan wheel when cleaning the wheel. This weight is used to balance the wheel. Moving the weight will cause the fan wheel to vibrate.

Motor Lubrication

The motors in these furnaces are permanently lubricated, and do not require periodic oiling.

Every time the filters are changed the following items should be visually inspected:

- Check combustion air and vent pipe for blockage or leakage.
- Check all components to be sure they are in good condition and that there are no obvious signs of deterioration.
- Check the drain lines to make sure there are no cracks or leaks.
- Check for dirt or lint on any surfaces or on components. Do not try to clean any of the surfaces or components. Cleaning of the furnace and its components must be done by a qualified service professional.

If, during the inspection of your furnace, you find any of the following conditions:

- Excessive amounts of dust and lint on components.
- Damaged or deteriorated components or surfaces.
- Leaks or blockage in the vent pipe passages.
- Water on any surface inside or outside of the furnace.

Do not operate the furnace, call a certified dealer / servicing contractor to check and / or clean your furnace, or for more information if you have questions about the operation of your furnace.

If all components appear to be in good operating condition, replace the front panels. Turn ON the gas and electrical power supplies to the furnace, and set thermostat to the desired temperature.

SECTION II: SERVICE AND MAINTENANCE MANUAL

SAFETY SECTION

The following safety rules must be followed when servicing the furnace.

⚠WARNING

ELECTRIC SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in dangerous operation, serious injury, death or property damage.

Improper servicing could result in dangerous operation, serious injury, and death or property damage.

- Before servicing, disconnect all electrical power to the furnace.
- When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.
- Verify proper operation after servicing.

FURNACE MAINTENANCE SECTION

The furnace should be cleaned and adjusted by a certified dealer or qualified service contractor once a year or before the start of every heating season. The following items must be cleaned and serviced or replaced if there are signs of deterioration.

1. The vent terminal screen (if applicable).
2. The furnace vent passageways. Should it be necessary to service the vent/air intake system, the manufacturer recommends this service be conducted by a qualified service agency. The operation of this appliance requires the reassembly and resealing of the vent/air intake system.
3. The furnace burners, ignitor and flame sensor.

SEQUENCE OF OPERATION

The following describes the sequence of operation of the furnace. Refer to Figure 1 for component location.

1. Call for 1st stage only
   - On a call for 1st stage heat, the thermostat closes a circuit between R and W1.
   - The Microprocessor in the Furnace Control runs a ‘Self Check’.
   - The Control checks the Primary Limit, Auxiliary Limit, and Roll-out Switches for closed contacts.
   - The Control checks that the Low Fire Pressure Switch (1LP) is open.
   - The Inducer Motor is energized on high speed, closing the contacts of 1LP.
   - The Control checks that 1LP is closed.
   - The Inducer is switched to low speed.
   - The Igniter is energized for 17 seconds.
   - The Gas Valve is energized on 1st Stage (Low Fire).
   - Flame Rectification is recognized within 7 seconds.
   - 30 seconds after flame is proven, the ‘Heat Low’ relay is energized providing 120 Volts AC to the Blower Motor.
   - At the same time, the EAC and Hum Hot relays are energized, providing 120 Volts AC to the EAC Hot and Hum Hot terminals.
2. Call for 2nd Stage after 1st Stage is operating
   - A call for 2nd Stage can be made by a 2-Stage thermostat, or by the Second-Stage timer that comes installed in the furnace.

NOTE: When using a 2-Stage thermostat, the Timer should be disconnected.

   - The Inducer Motor is shifted to high speed by the control, closing the contacts of 2LP (The High Fire Pressure Switch.).
   - The Control checks that 2LP is closed.
   - The Gas Valve is energized on 2nd Stage (High Fire).
   - The Control simultaneously de-energizes the Heat Low relay and energizes the Heat High relay, providing 120 Volts AC to a different speed of the Blower Motor.
3. 2nd Stage is satisfied, 1st Stage still calling.
   - If a Single Stage Thermostat and the 2nd Stage Timer are used, the Furnace will stay on High Fire until the thermostat is satisfied.
   - When the circuit between R and W2 is opened, the Control switches the Inducer Motor to low speed, causing the contacts of 2LP to open.
   - When 2LP opens, 2nd Stage of the Gas Valve is de-energized.
   - 30 seconds later, the Control switches the Blower from Heat High to Heat Low.
4. 1st Stage Satisfied
   - The Thermostat opens the circuit between R and W1
   - Immediately the Gas Valve is de-energized and Flame Rectification is lost.
   - The Inducer Motor is de-energized after a 15 second Post Purge and the Hum Hot terminal is de-energized.
   - The ‘Fan Off Delay’ circuit is initiated. The Delay time can be field set at 60, 90, 120, or 180 seconds. It comes from the factory set at 60 seconds.
   - The Heat Low terminal is de-energized; stopping the Blower and the EAC terminal is de-energized.
5. 1st and 2nd Stage called simultaneously
   - The 1st stage call is processed as described in paragraph 1 above.
   - Once Flame Rectification is established, 2nd Stage is entered immediately as described in paragraph 2 above.

6. 1st and 2nd Stage satisfied simultaneously
   - Both stages of the Gas Valve are de-energized.
   - Flame Rectification is lost.
   - The Inducer and Hum relays are de-energized after a 15-second post purge.
   - 30 seconds later the Control shifts the Blower from Heat High to Heat Low.
   - After the Blower-Off Delay Circuit is satisfied, the Blower and EAC are de-energized.
7. Manual Fan Operation
   - With the thermostat in the Fan On position, a circuit is completed between R and G of the Control.
   - The Heat Low and EAC relays are energized by the Control.
8. Call for Cooling
   - The thermostat closes two circuits R to Y and R to G. Since the Outdoor Unit is connected to Y and C at the Control, it is energized.
   - The Cool and EAC relays are energized by the Control.
   - A Blower-Off Delay Timing Circuit is energized by the call on Y.
9. Cooling call satisfied
   - The thermostat opens the R to Y and R to G circuits.
   - The Outdoor Unit is de-energized.
   - The 60-second, Blower-Off Delay, timing circuit is initiated.
   - After 60 seconds, the Cool and EAC relays are de-energized.

CFM / TIMER BOARD

Variable speed motors will adjust the motor speed in order to maintain the indoor fan CFM. The CFM / Timer Board is used to control the blower speed thus the CFM when the unit is operating in the heating or cooling modes. The blower CFM for cooling can be modified by changing the jumper pin position on the taps selection marked COOL and ADJ.

The blower CFM for heating can be modified by changing the jumper pin position on the taps selection marked HEAT and ADJ. The taps selection pins have been preset at the factory to provide the maximum CFM. Table 16 in the installation manual list the recommended jumper pin settings.

If a lesser CFM is required for a specific HVAC system the taps selection pins can be moved to the "B", "C", or "D" positions. Pin "A" will provide the highest CFM and "D" will provide the lowest CFM. The taps selection marked DELAY are used for cooling only. The recommended settings for these jumper pins are listed in Delay taps selection.

HEATING AIRFLOW

The heating airflow has been preset at the factory to provide maximum CFM. If a lesser CFM is required for a specific HVAC system the “JUMPER” on the HEAT selection pins on the CFM-Timer Board may be moved to **tap “B”, “C”, or “D”.**

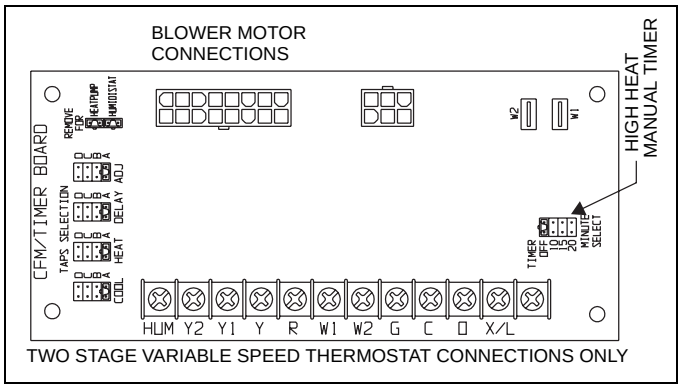


FIGURE 7: CFM / Timer Board

HEAT Taps Selection on the CFM / Timer Board

Pin Position A: will provide the highest CFM.

Pin Position B and C: are the medium and medium low CFM settings.

Pin Position D: will provide the lowest CFM.

Refer to Table 16 in the installation manual for the proper “HEAT” Taps Selection for the model furnace you are installing.

NOTE: When changing jumper positions, make sure that the jumper is pushed all the way on the pins. If the jumper is not making good contact or is left off completely, the blower will operate as if the jumper were in the “**A” position**.

NOTE: Power to the blower must be removed for at least 4 seconds after a heat or cool tap selection change, in order for the motor to recognize an adjustment. The fixed blower on delay and adjustable blower-off delay will function as described in the “OPERATION AND MAINTENANCE" Section in the Users Information Manual.

Heating Indoor Fan Off Delay

Changing the dipswitches on the Integrated Control can change the indoor fan “OFF” time delay. The dipswitches are located above the thermostat terminals. Refer to Figure 8 for the dipswitch settings to obtain the desired fan OFF delay. The blower off delay must be long enough to adequately cool the furnace, but not so long that cold air is blown into the living space.

The blower on delay is fixed at 30 seconds and cannot be adjusted.

The continuous fan speed dipswitch (switch # 3 on the Integrated Control) does not function on variable speed models. Dipswitch # 3 should be left in the off position.

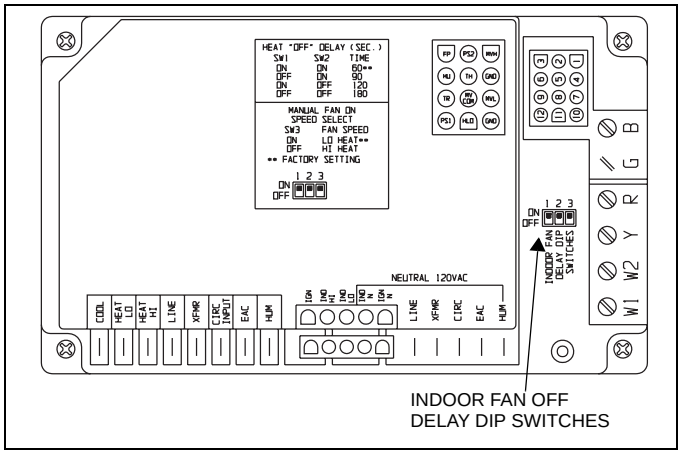


FIGURE 8: White Rodgers Intergrated Control

Continuous Blower:

There are two modes of continuous blower operation.

- **Mode One:** The blower is controlled directly through the blower motor. In the first mode, when the thermostat fan-switch is set to the ON position a circuit is completed between terminals “R” and “G” of the thermostat. The continuous fan speed will be 63% of the high cool speed. If more air is desirable the green wire labeled (G Cool Speed) may be connected to the “G” terminal of the ignition control to achieve HIGH COOL speed (DIP switch number 3 on the ignition control must be in the OFF position).
- **Mode Two:** The blower is controlled through the ignition control. This configuration is used with multi-speed direct drive PSC motors. **Do not use this configuration with a variable speed motor.** Refer to Heating Indoor Fan Off Delay for Fan ON / OFF Delays.

The air cleaner and the blower motor are energized through the ignition control or directly through the motor.

COOLING AIRFLOW

The cooling airflow is preset at the factory to provide approximately 90 percent of the maximum CFM and must be field adjusted to match the HVAC system at installation. Refer to the outdoor unit installation instruction for the recommended airflow for the cooling system.

Delay Taps Selection on the CFM / Timer Board

Pin Position A: is the factory setting and is used for test purposes. The blower will operate at 100% of the programmed cooling air flow for 60 seconds, with a 15 second coast to stop.

Pin Position B: is for a two-stage condenser. This results in a 45 second off delay at 82% of the programmed cooling airflow with a 15-second coast to stop

Pin Position C: is for a system with a TXV or solenoid valve. This results in a 45 second off delay at 75% of the programmed cooling airflow with a 15-second coast to stop.

Pin Position D: Is for a system without a TXV or solenoid valve. This results in a 60 second off delay at 82% of the programmed cooling airflow with a 15-second coast to stop.

Cool and ADJ Taps Selection on the CFM / Timer Board

Pin Position A, B, C, and D: The pin settings are dependent on the model furnace and the CFM that is desired for your application. Table 16 in the installation manual has two columns under each model furnace. These columns are the high / low speed CFM options for each model. On the right side of the table there are two columns labeled “COOL TAP” and “ADJ TAP”. Find the model furnace you have, scroll down the high / low columns until you come to the desired CFM, then go to the last two columns in that row to find the recommended “COOL TAP” and “ADJ TAP” settings. Once you have found the settings, go to the CFM / Timer Board. Under “TAP SELECTION” you will see a column labeled “COOL” and one labeled “ADJ”. Place the PINS on the proper COOL setting and the proper ADJ setting that you found in the table. Refer to Figure 7 for the location COOL, HEAT, DELAY and ADJ TAP SELECTIONS and the pin positions on the CFM / Timer Board.

DIRECT DRIVE BLOWER MOTOR

A failed variable speed motor should always be replaced with a variable speed motor suitable for the furnace model being serviced. However, if one is not available, a direct-drive multi speed blower motor can be used as a **TEMPORARY REPLACEMENT MOTOR** in the interim.

Removal of the Variable Speed Blower Motor Assembly:

The procedure for removing the variable speed blower assembly:

1. Disconnect the electrical supply to the furnace and remove the access doors.
2. Remove blower assembly mounting screws and slide the blower assembly out of the slots in the deck. If the two shipping screws were not previously removed, also remove and discard these two screws located on each front corner of the blower assembly.
3. Loosen the blower wheel set screw that secures the blower wheel to the blower motor shaft.
4. Remove the motor mount bolts.
5. Slide the variable speed motor out of the blower housing.

Reassembly of the Variable Speed Blower Motor Assembly:

1. Slide the new variable speed motor in to the blower housing. Make sure you line up the flat side on the motor shaft with the setscrew on the hub in the center of the blower wheel.
2. Install the motor mount bolts in to the fan housing.
3. Center the indoor fan wheel in the fan housing and tighten the blower wheel set screw on the flat side the blower motor shaft.
4. Reinstall blower assembly mounting screws and slide the blower assembly back in the slots in the deck. Do not reinstall the two shipping screws were removed.
5. Install the access doors.
6. Restore power to the furnace and verify operation.

INSTALLATION OF PSC MOTOR:

The motor speed tap wires are connected to the 1/4" quick connect terminal on the Integrated Control using the black jumper wire that is secured to the wire harness inside the burner compartment and is marked “PSC Motor”. Follow the instructions below to properly install the PSC motor.

1. Install the PSC direct drive motor into motor mount.
2. Slide motor in motor mount insuring there is no interference between moving and stationary parts. Position wire leads downward. Tighten motor mount band screw to 30 in. lbs.
3. Center the blower wheel in the blower housing and align the shaft flat with the blower wheel set screw. Tighten setscrew to 30 in. lbs.
4. Replace blower assembly and fasten with 5 screws
5. Strap motor capacitor to electric panel. Refer to Table 2 for proper capacitor selection.
6. Fasten electric panel to blower housing.
7. Remove red wire from circuit input terminal. Plug jumper wire (attach to motor power harness) on 120-volt line terminal on ignition control and jumper to circuit Input. Connect brown door switch wire to jumper.
8. Connect white main harness lead to Line neutral.
9. Connect motor leads to cool, heat lo and heat high per electrical wire diagram table in the Installation manual.
10. Connect brown capacitor leads from motor to capacitor and cover terminals with boot supplied.
11. The motor ground (green) wire is secured to the right front of the blower mounting plate with a screw.
12. Restore power to the furnace and verify operation.

TABLE 2: Replacement PSC Motor / Capacitor Information

High Fire Inputs	Airflow	Cabinet Size	Motor Part Number	Motor Horsepower	Capacitor Part Number	Capacitor Rating
BTU/H (kW)	CFM (m^3)					
60,000 (17.6)	1,200 (33.98)	B	024-23271-000	1/2	024-20045-000	7.5 f
80,000 (23.4)	1,600 (45.31)	C	024-26002-000	3/4	024-20046-000	10.0 f
100,000 (29.3)	2,000 (56.63)	C	024-23288-001	1.0	024-20446-000	15.0 f
120,000 (35.1)	2,000 (56.63)	D	024-23238-001	1.0	024-20446-000	15.0 f

Hot Surface Ignition System

⚠WARNING

HOT SURFACE IGNITION SYSTEM
Do not attempt to light this furnace by hand (with a match or any other means). There may be a potential shock hazard from the components of the hot surface ignition system. The furnace can only be lit automatically by its hot surface ignition system.

FURNACE CLEANING SECTION

NOTE: The cleaning operations listed below must be performed only by a qualified service agency.

Burner Removal/Cleaning

The main burners should be checked periodically for dirt accumulation. If cleaning is required, follow this procedure:

1. Turn off the electrical power to the unit.
2. Turn off the gas supply at the external manual shut-off valve and loosen the ground union joint.
3. Remove the upper burner door and remove the burner box cover.
4. Disconnect wires from flame sensor, rollout switch and HSI igniter. Remove igniter carefully, as it is easily broken.
5. Remove the screws that hold the burner box assembly to the vest panel and remove the assembly.
6. Remove burners from the burner assembly.
7. Burners may be cleaned by rinsing in hot water.
8. Reassemble the burners in the reverse order.

Cleaning the Heat Exchanger

Lower Heat Exchanger Access

1. Turn off the electrical power to the unit and turn off gas supply at the shutoff valve.
2. Remove the blower and burner compartment access doors. Disconnect the gas supply piping at the union to permit removal of the entire burner and gas control assembly from the vestibule panel. Use the wrench boss on the gas valve when removing or installing this piping. See Figure 4.
3. Unplug the igniter from the wire harness. Disconnect sensor and rollout switch wires located on top of the air shield. Identify and note the location of all leads for ease of reinstallation. Also disconnect the wires at the side rollout switches (upflow only) and the gas valve wires.
4. Remove the screws holding the burner assembly to the vestibule panel and remove this assembly. Handle the assembly carefully since it contains the igniter, which is fragile and easily broken. The lower portion of the heat exchanger will now be exposed. To clean the burner assembly, use a vacuum cleaner, or remove the burners as outlined in burner cleaning, and clean in hot water.

Upper Heat Exchanger Access

1. Perform steps 1-4 above.
2. Disconnect vent piping from the vent motor assembly at the top panel on the furnace (upflow only). On downflow models, the vent pipe is secured to the vent motor outlet with a screw. Remove this screw before proceeding.
3. Unplug the vent motor wires and ground wire. Remove the pressure switch tubing at the top on the vent motor housing.

NOTE: It is recommended that replacement gaskets be available before removing vent motor.

1. Remove six mounting screws that hold the vent motor to the restrictor plate. The surface is gasketed and the gasket can be reused if it is carefully removed. It is necessary to remove this assembly to gain access to the restrictor plate mounting holes. The assembly may be vacuumed if cleaning is necessary. If any vent assembly parts are damaged, replace with an entire new assembly (except for gaskets).
2. Remove the perimeter screws attaching the restrictor plate assembly to the vestibule panel. The surface is also gasketed. The assembly, including the flue baffle plate (rear) may be vacuumed or cleaned with hot water if necessary.
3. The upper portion of the heat exchanger is now accessible. With a long flexible wire brush, clean inside each tube at both the top and bottom. The brush must pass around the rear heat exchanger tubes. Vacuum loose scale and dirt from each tube.
4. Clean - Replace all components in reverse order. Re-gasket all surfaces which required a gasket. Reconnect all wiring. Reattach vent pipe and gas supply lines before restoring service to furnace. Restore electrical power, check gas supply piping for leaks, and then verify furnace operation.

⚠ CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Cleaning the Secondary Heat Exchanger

1. Follow steps 1 - 8 under cleaning the Heat Exchanger.
2. Remove the vent piping from the vent blower housing. Disconnect the drain lines from the vent blower housing and from the condensate drain pan. Remove the vent blower housing blower and the condensate pan. The turbulators can then be gently removed from the secondary heat exchanger.
3. Using a stiff wire brush, remove the loose scale or soot from each tube.
4. Vacuum the secondary heat exchanger.
5. Finish the cleaning procedure by following steps 11 thru 13 under cleaning the Heat Exchanger.

TROUBLESHOOTING

The following visual checks should be made before troubleshooting:

1. Check to see that the power to the furnace and the ignition control module is ON.
2. The manual shut-off valves in the gas line to the furnace must be open.
3. Make sure all wiring connections are secure.
4. Review the sequence of operation. Start the system by setting the thermostat above the room temperature. Observe the system's response. Then use the troubleshooting section in this manual to check the system's operation.

FURNACE DIAGNOSTICS

Control Module Fault Code Explanatios

1 Flash (Continuous Flash; 1 second on, 1 second off)

Reason: Flame sensed without a call for heat.

Effect: Blower and Inducer operate at Low Heat speed.

Causes: Gas Valve stuck open; Gas Valve is slow closing.
Incorrect wiring (Gas Valve is energized when it should not be).
Defective ground, Flame rod shorted to ground.

2 Flash

Reason: Contacts of 1LP are stuck in the closed position. It must first see an open circuit, then a closed circuit to ensure safety.

Effect: Control will not continue the ignition process.

Causes: Incorrect wiring. (A jumper left in place across the switch.).
A failed switch.

3 Flash (Part One; 1st Stage)

Reason: 1LP did not close at the beginning of the heat cycle.

Effect: Inducer operates on Low Heat speed. The Control will not continue the ignition process.

Causes: Faulty Inducer
Blocked or restricted vent system.
Vent system that exceeds the specifications.|
Blocked condensate drain
Broken or leaking pressure switch tubing
Faulty 1LP

3 Flash (Part Two; 2nd Stage)

Reason: 2LP did not close within 30 seconds of a call for 2nd Stage heat.

Effect: After 30 seconds the Control will enter a 'Soft Lockout' period, and the Inducer will be de-energized. After 3 minutes the Control will try again. The procedure will be repeated if 2LP does not close.

Causes: Faulty Inducer.
Restricted vent system.
Vent system that exceeds specifications.
Blocked or restricted condensate drain.
Broken or leaking pressure switch tubing.
Faulty 2LP.

4 Flash

Reason: Open limit circuit. The limit circuit includes the Primary Limit, Auxiliary Limit, and Rollout Switches.

Effect: Blower and Inducer operate at Low Heat speed. If the open switch resets, the furnace will resume normal operation.

Causes: Dirty Filter
Improperly sized duct system.
Incorrect blower speed selection
Incorrect firing rate
Faulty blower motor
Faulty Control

6 Flash

Reason: 1LP has opened five times during one call for heat.

Effect: Control enters 'Soft Lockout'. It will automatically reset and try again after 1 hour.

Causes: Restricted vent system
Vent system that exceeds specifications
High wind

7 Flash

Reason: Flame rectification could not be established
- Flame rectification must be maintained for 7 seconds to be recognized by the control.

Effect: Control tries 3 times then goes into 'Soft Lockout'.
- There is a 1-minute delay after a failed ignition attempt
- 7 seconds is added to the igniter warm-up time after a failed ignition attempt.

Causes: Faulty hot surface igniter
Contaminated flame rod.
Poor ground connection to furnace.
Reversed polarity to furnace
Moisture on flame sensing circuit
Low gas pressure
Faulty gas valve

8 Flash

Reason: Flame rectification has been lost 5 times, during 1 call for heat, after it was recognized by the control.
- Flame rectification is recognized after 7 seconds of burner operation.

Effect: Control goes into 'Soft Lockout' after the 5th attempt to maintain combustion.

Causes: Restricted vent system.
Blocked or restricted condensate drain.
Foreign objects in the inducer housing.

LED on constantly

Reason: The control discovered an internal fault during its self-check procedure.

Effect: All operations cease.

Causes: Voltage spikes.
Supply voltage is too high or low.
- Reset the control by breaking line voltage for 30 seconds.
Control failure.

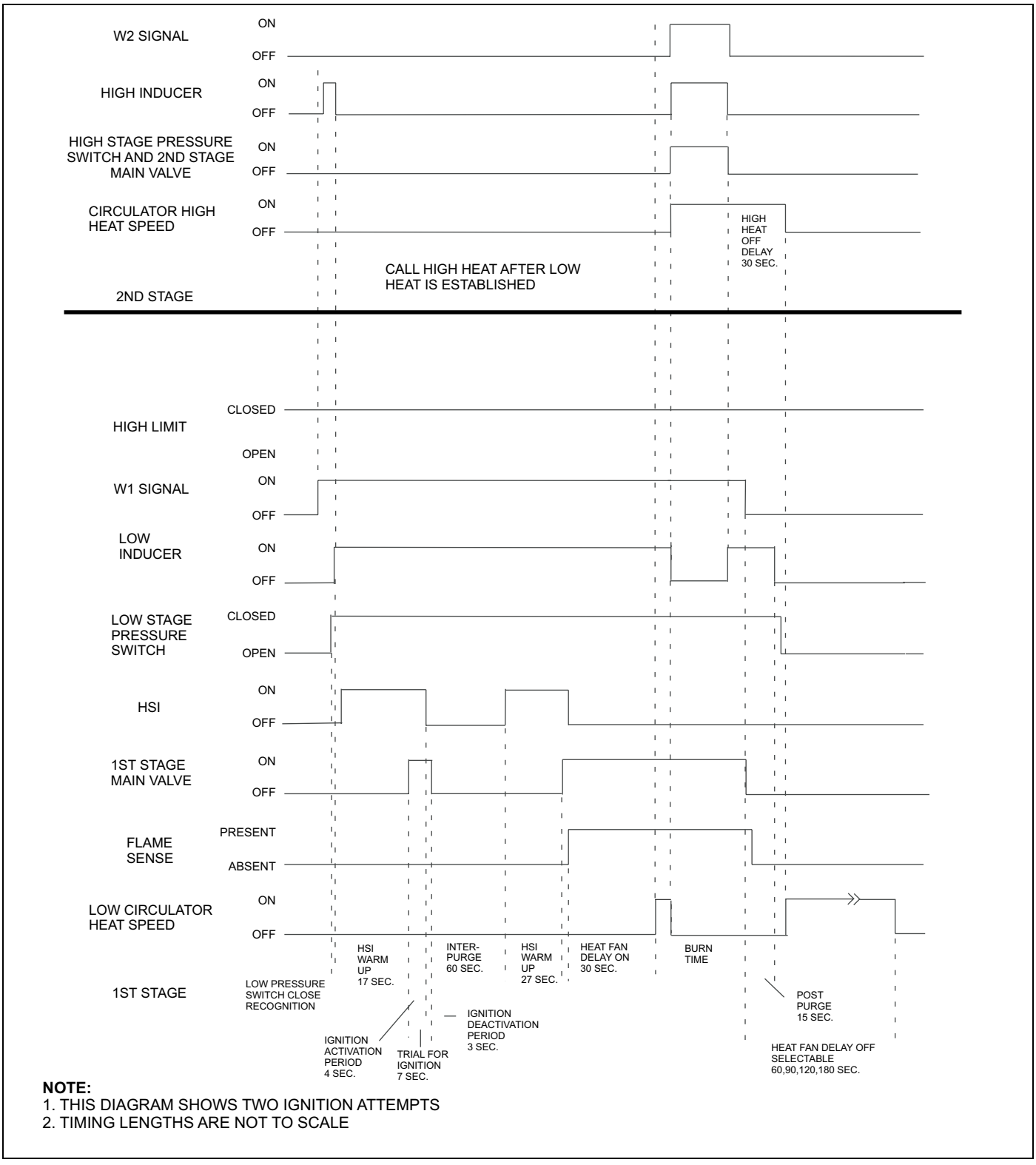
⚠WARNING

Never bypass pressure switch to allow furnace operation. To do so will allow furnace to operate under potentially hazardous conditions.

Do not try to repair controls. Replace defective controls with UPG Source 1 Parts.

Never adjust pressure switch to allow furnace operation.

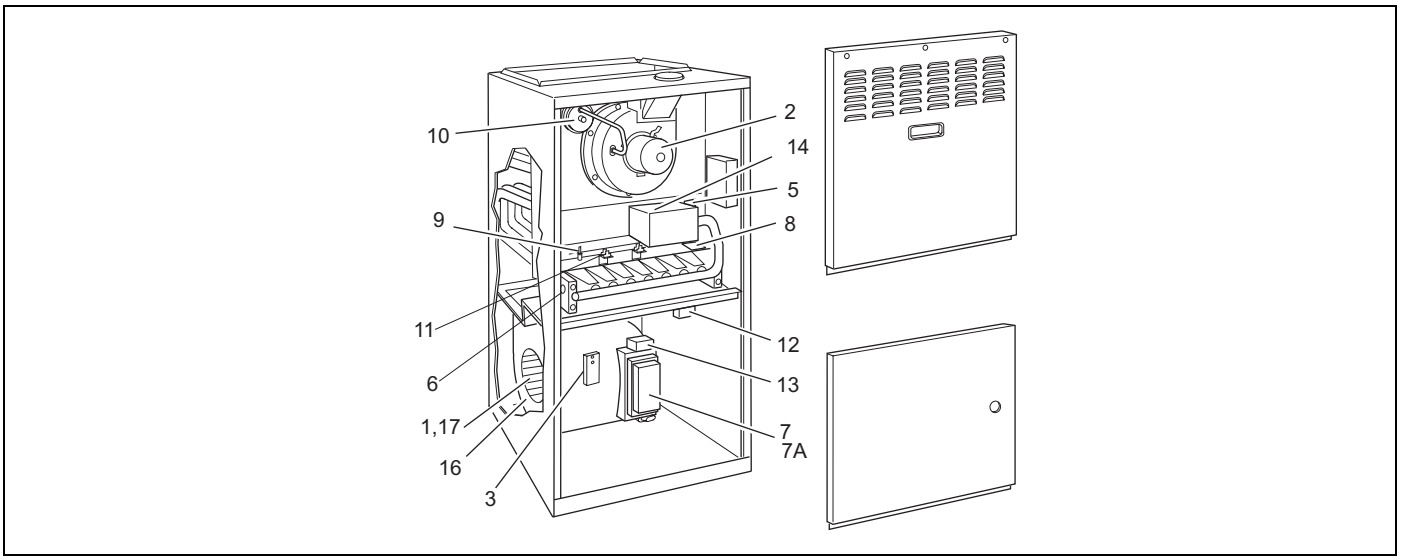
IGNITION CONTROL (P/N 031-01909-000)
Normal flame sense current is approximately
2.4 microamps DC (µa)
Low flame signal control lockout point is
0.15 microamps DC (µa)

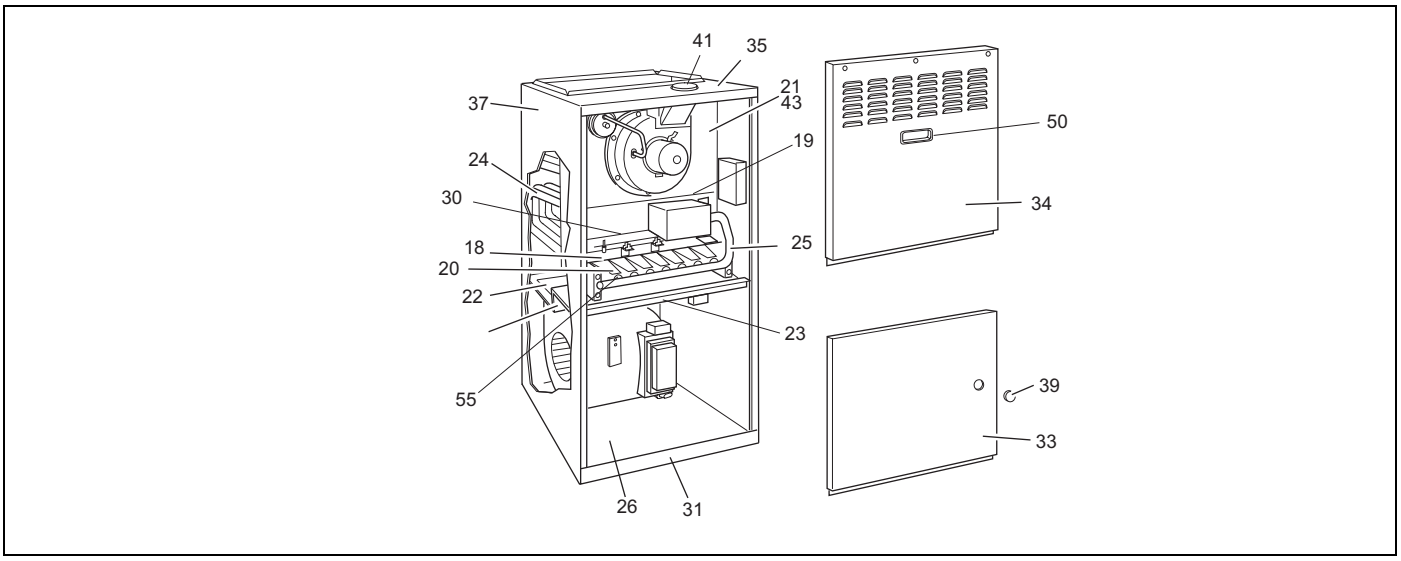


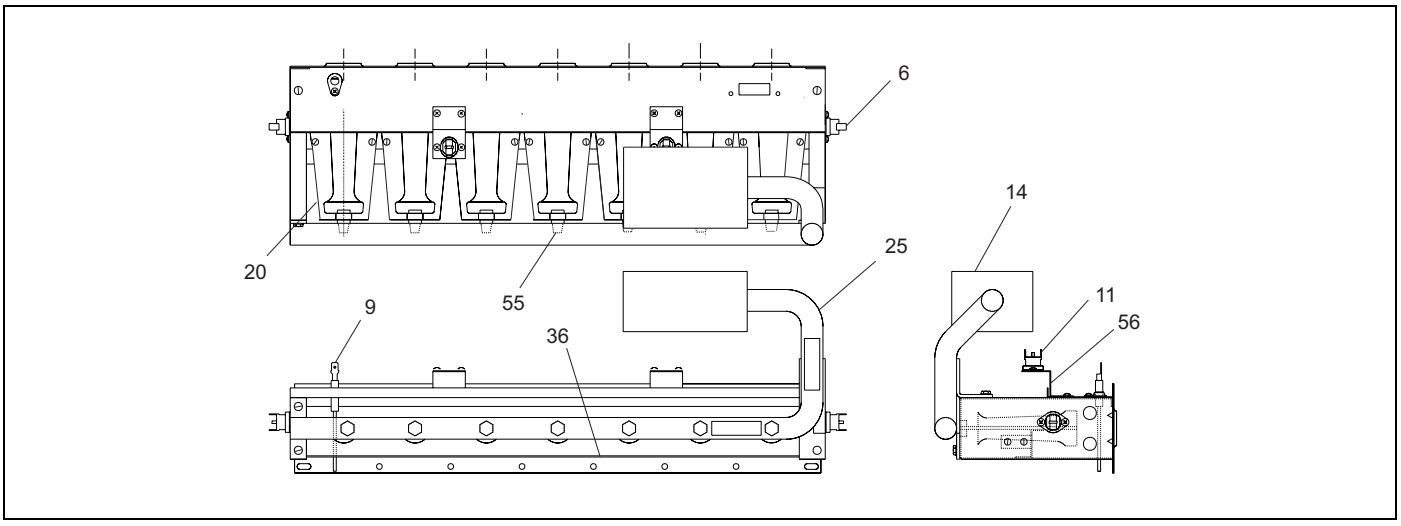
NOTE:
1. THIS DIAGRAM SHOWS TWO IGNITION ATTEMPTS
2. TIMING LENGTHS ARE NOT TO SCALE

FIGURE 9: Furnace Control Event Schedule

SECTION III: REPLACEMENT PARTS LIST







ITEM	DESCRIPTION
MOTOR	
1	MOTOR,DIRECT DRIVE BLOWER
2	MOTOR,VENTOR ASS'Y.
ELECTRICAL	
3	CFM SELECTION BOARD
4	
5*	CONTROL, HIGH LIMIT
6	CONTROL,Flame Roll Out (2ea.)[ROS1,2]
7	CONTROL,FURNACE [FC]
7A	FUSE (ARO 3)
8	IGNITER
9	SENSOR, FLAME
10	SWITCH, AIR PRESSURE [1LP]
11	SWITCH, FLAME ROLL-OUT [ROS 3]
12	SWITCH, DOOR [SW]
13	TRANSFORMER
14	VALVE, GAS
15	CONTROL, AUX. LIMIT(2 ea.),LS2,LS3]-
AIR MOVING	
16	HOUSING, BLOWER
17	WHEEL, BLOWER
FABRICATED PARTS	
18	PANEL, AIR SHIELD
19	BAFFLE, FLUE
20	BURNER, MAIN GAS
21	PLATE, RESTRICTOR
22	DECK, BLOWER (Rear)
23	DECK, FRONT
24	HEAT EXCHANGER ASS'Y
25	MANIFOLD, GAS
26	PAN, BASE
27	

ITEM	DESCRIPTION
28	
29	
30	WRAPPER, BURNER BOX
31	CHANNEL, TOE PLATE
32	
33	PANEL, FRONT (Blower)
34	PANEL, FRONT (Burner)
35	PANEL, TOP
36	SUPPORT, BURNER
37	WRAPPER, CABINET
38	
39	PLUG, WINDOW, CLEAR - .875"
MISCELLANEOUS	
40*	CLIP,FILTER RETAINER (2 Req'd.)
41	COLLAR, FLUE
42*	FILTER, AIR
43	GASKET, RESTRICTOR PLATE
44*	SPRING, DOOR
45	
46*	SCREEN, BURNER ("LOW NOX")
47	
48	
49*	BRACKET, IGNITOR
50	HANDLE, DOOR
51*	ISOLATOR, TUBE (3 Req'd.)
52*	ISOLATOR, WASHER (3 Req'd.)
53*	ISOLATOR,SLEEVE (3 Req'd.)
54*	MOUNT, MOTOR
55	ORIFICE, BURNER (Natural #45)
56	BRACKET, ROLL-OUT SWITCH
57*	RETAINER, FILTER
58*	DIAGRAM, WIRING
59*	HARNESS, MOTOR WIRING (16 Pin)

NOTE: *Not Shown

New replacement parts shown in **bold** face type at the first printing of parts list dated 11/02.

Major components and suggested stocking items are shown with shaded item number.

FIELD INSTALLED ACCESSORIES - NON-ELECTRICAL

FIELD INSTALLED ACCESSORIES - NON-ELECTRICAL		
MODEL NO.	**DESCRIPTION**	**USED WITH**
1NP0480	PROPANE (LP) CONVERSION KIT	ALL MODELS
1SR0302	EXTERNAL SIDE FILTER RACK (6-PACK)	ALL MODELS
1BR0314	EXTERNAL BOTTOM RETURN FILTER RACK WITH HIGH VELOCITY FILTER	ALL 14-1/2" ("A") UNITS
1BR0317		ALL 17-1/2" ("B") UNITS
1BR0321		ALL 21" ("C") UNITS
1PS0313	HIGH ALTITUDE PRESSURE SWITCH KIT (DOES NOT INCLUDE ORIFICES)	FOR APPLICATION INFORMATION SEE FORM 650.78-N1.1V
1PS0314		

REPLACEMENT PART CONTACT INFORMATION

This is a generic parts list. To request a complete parts list, refer to the contact information below:

- Visit our website at www.source1parts.com for the following information:
  1. Search for a part or browse the catalog.
  2. Find a dealer or distributor.
  3. Customer Service contact information.
     a. Click on the "Brand Links" button
     b. Click on the "Customer Service" button
- You can contact us by mail. Just send a written request to:

York International
Consumer Relations
5005 York Drive
Norman, OK 73069

SECTION IV: WIRING DIAGRAM

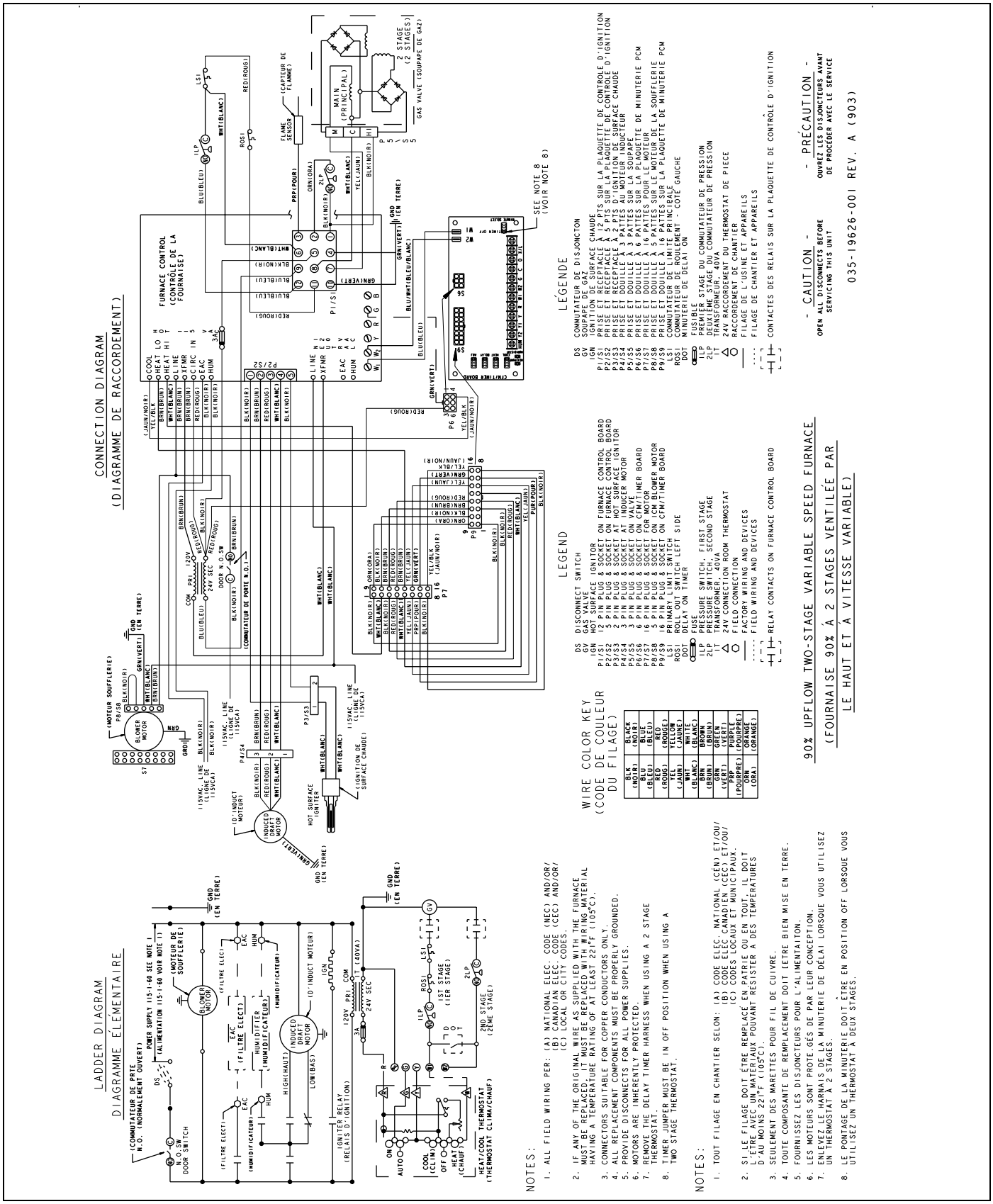

CONNECTION DIAGRAM
(DIAGRAMME DE RACCORDEMENT)
LADDER DIAGRAM
DIAGRAMME ÉLÉMENTAIRE
LEGEND
LÉGENDE
WIRE COLOR KEY
(CODE DE COULEUR DU FILAGE)
NOTES:
1. ALL FIELD WIRING PER: (A) NATIONAL ELEC. CODE (NEC) AND/OR/ (B) CANADIAN ELEC. CODE (CEC) AND/OR/ (C) LOCAL OR CITY CODES.
2. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 221°F (105°C).
3. CONNECTORS SUITABLE FOR COPPER CONDUCTORS ONLY.
4. ALL REPLACEMENT COMPONENTS MUST BE PROPERLY GROUNDED.
5. PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
6. MOTORS ARE INHERENTLY PROTECTED.
7. REMOVE THE DELAY TIMER HARNESS WHEN USING A 2 STAGE THERMOSTAT.
8. TIMER JUMPER MUST BE IN OFF POSITION WHEN USING A TWO STAGE THERMOSTAT.
NOTES:
1. TOUT FILAGE EN CHANTIER SELON: (A) CODE ELEC. NATIONAL (CEN) ET/OU/ (B) CODE ELEC CANADIEN (CEC) ET/OU/ (C) CODES LOCAUX ET MUNICIPAUX.
2. SI LE FILAGE DOIT ÊTRE REMPLACÉ EN PATRIE OU EN TOUT, IL DOIT L'ÊTRE AVEC UN MATÉRIAUX POUVANT RESISTER A DES TEMPERATURES D'AU MOINS 221°F (105°C).
3. SEULEMENT DES MARETTES POUR FIL DE CUIVRE.
4. TOUTE COMPOSANTE DE REMPLACEMENT DOIT ÊTRE BIEN MISE EN TERRE.
5. FOURNISSEZ LES DISJONCTEURS POUR L'ALIMENTAITON.
6. LES MOTEURS SONT PROTE.GÉS DE PAR LEUR CONCEPTION.
7. ENLEVEZ LE HARNAIS DE LA MINUTERIE DE DÉLAI LORSQUE VOUS UTILISEZ UN THERMOSTAT À 2 STAGES.
8. LE PONTAGE DE LA MINUTERIE DOIT ÊTRE EN POSITION OFF LORSQUE VOUS UTILISEZ UN THERMOSTAT À DEUX STAGES.
90% UPFLOW TWO-STAGE VARIABLE SPEED FURNACE
(FOURNAISE 90% Á 2 STAGES VENTILÉE PAR LE HAUT ET Á VITESSE VARIABLE)
- CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT
- PRÉCAUTION - OUVREZ LES DISJONCTEURS AVANT DE PROCÉDER AVEC LE SERVICE
035-19626-001 REV. A (903)

FIGURE 10: Wiring Diagram

NOTES

Limited Warranty

UPG warrants this product to be free from defects in factory workmanship and material under normal use and service and will, at its option, repair or replace any parts that prove to have such defects according to the terms outlined on this warranty. This warranty covers only the equipment described by the Product Model Number and Serial Number listed on the Warranty Registration Card.

UPG warrants the primary heat exchangers in the product to be free from defects in factory workmanship and material under normal use and service and will at its option, repair or furnish a replacement heat exchanger, either new or reconditioned, that meets the intended fit, use and function of the original heat exchanger for any heat exchanger furnished by UPG which proves to have such defects within the duration of warranty coverage. Alternatively, UPG may, at its option, extend a replacement allowance to be applied toward the purchase of a new furnace or packaged unit marketed by UPG. The exact amount of the allowance will be determined at the discretion of UPG, based upon current market conditions, but in no case shall this allowance exceed thirty (30) percent of the original consumer purchase price of the furnace, excluding such items as ductwork, wiring, piping and installation costs. UPG shall have no responsibility hereunder for installation, shipping, handling or other charges except as specifically provided herein.

For your benefit and protection, return the Warranty Registration Card to UPG promptly after installation. This will initiate the warranty period and allow us to contact you, should it become necessary. In the absence of a recorded Warranty Registration Card, the warranty period will begin upon product shipment from UPG.

This warranty extends only to the original consumer purchaser and is non-transferable. For this warranty to apply, the product must be installed according to UPG recommendations and specifications, and in accordance with all local, state, and national codes; and the product must not be removed from its place of original installation. The warranty period for repair or replacement parts provided hereunder shall not extend beyond the warranty period stated on the reverse side of this warranty.

FURNACE TYPE		HEAT EXCHANGER			PARTS
		Residential Applications		Non-Residential Applications	
		Original Owner	Subsequent Owner		
80%	P*DU-"V" / G8V / L8V	20	N/A	10	5

UPG strongly recommends regular periodic preventative maintenance on this equipment. The person most familiar with the equipment in your HVAC system is a UPG dealer. The UPG dealer can ensure your maintenance program meets the conditions of the "UPG Warranty", maximize the efficiency of the equipment, and service your unit within the mandated guidelines with regard to unlawful discharge of refrigerants into the atmosphere.

This warranty applies only to products installed in the United States and Canada.

EXCLUSIONS

This warranty does not cover any:

1. Shipping, labor, or material charges.
2. Damages resulting from transportation, installation, or servicing.
3. Damages resulting from accident, abuse, fire, flood, alteration, or acts of God (tampering, altering, defacing or removing the product serial number will serve to void this warranty).
4. Damages resulting from use of the product in a corrosive atmosphere.
5. Damages resulting from inadequacy or interruption of electrical service or fuel supply, improper voltage conditions, blown fuses, or other like damages.
6. Cleaning or replacement of filters.
7. Damages resulting from failure to properly and regularly clean air and/or water side of condenser and evaporator.
8. Damages resulting from: (I) freezing of condenser water or condensate; (II) inadequate or interrupted water supply; (III) use of corrosive water; (IV) fouling or restriction of the water circuit by foreign material or like causes.
9. Damages resulting from operation with inadequate supply of air or water.
10. Damages resulting from use of components or accessories not approved by UPG (vent dampers, etc.).
11. Increase in fuel or electric cost.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

SOME STATES DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTY, SO THAT THE ABOVE DISCLAIMER MAY NOT APPLY TO YOU.

SOME STATES ALLOW ONLY A PARTIAL LIMITATION ON IMPLIED WARRANTIES TO LIMIT THE DURATION OF IMPLIED WARRANTIES TO THE DURATION OF THE EXPRESS WARRANTY. IN SUCH STATES, THE DURATION OF IMPLIED WARRANTIES IS HEREBY EXPRESSLY LIMITED TO THE DURATION OF THE EXPRESS WARRANTY ON THE FACE HEREOF.

IN NO EVENT, WHETHER AS A RESULT OF BREACH OF WARRANTY OR CONTRACT, TORT (INCLUDING NEGLIGENCE) STRICT LIABILITY OR OTHERWISE, SHALL UPG BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF USE OF THE EQUIPMENT OR ASSOCIATED EQUIPMENT, LOST REVENUES OR PROFITS, COST OF SUBSTITUTE EQUIPMENT OR COST OF FUEL OR ELECTRICITY. THE ABOVE LIMITATIONS SHALL INURE TO THE BENEFIT OF UPG'S SUPPLIERS AND SUBCONTRACTORS. THE ABOVE LIMITATION ON CONSEQUENTIAL DAMAGES SHALL NOT APPLY TO INJURIES TO PERSONS IN THE CASE OF CONSUMER GOODS.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, OR FOR STRICT LIABILITY IN TORT, SO THAT THE ABOVE EXCLUSIONS AND LIMITATIONS MAY NOT APPLY TO YOU.

UPG DOES NOT ASSUME, OR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR UPG, ANY OTHER LIABILITY FOR THE SALE OF THIS PRODUCT.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

For Owner's Information:

PRODUCT MODEL. NO. _____ INSTALLATION DATE _____
UNIT SERIAL NO. _____ INSTALLING DEALER _____

Subject to change without notice. Printed in U.S.A.
035-19913-001 Rev. A (0404)
Copyright © by York International Corp. 2004. All rights reserved.
Supersedes: 035-17440-000 Rev. C (0801)

Unitary Products Group
5005 York Drive
Norman OK 73069